

403.A.  1 APR 1947

ANNUAL REPORT

AND

TRANSACTIONS

OF THE

YORKSHIRE

PHILOSOPHICAL SOCIETY

FOR THE YEAR

1945

PRESENTED TO THE ANNUAL MEETING,

8th APRIL, 1946.

PRINTED BY ORDER OF THE COUNCIL.

1946.

Issued December, 1946.

The Yorkshire Philosophical Society.

(Founded 1822.)

Patroness :

HER MAJESTY QUEEN MARY.

Trustees :

THE RT. HON. THE EARL OF FEVERSHAM.

THE RT. HON. THE EARL OF SCARBROUGH.

SIR FRANCIS W. TERRY, J.P.

GEORGE A. AUDEN, M.D., M.A., Ph.D., F.R.C.P., F.S.A.

GEOFFREY THOMPSON, M.A., F.S.A.

COL. INNES N. WARE, O.B.E.

Officers for the Year 1946:

President :

THE RT. HON. THE EARL OF FEVERSHAM.

Vice-Presidents :

CHARLES ALLEN.

T. GOULTON LEONARD, M.B.E.

REV. A. RAINE, M.A.

ALD. W. H. BIRCH, J.P.

SIDNEY MELMORE, B.Sc.

GEOFFREY THOMPSON, M.A.,

SIR FRANCIS W. TERRY, J.P.

F.S.A.

J. L. BROCKBANK, M.A.

K. E. T. WILKINSON, B.A.,

COL. INNES N. WARE, O.B.E.

LL.B.

A. W. PING, M.A.

J. A. KNOWLES, F.S.A.

Council :

J. F. E. GELSON WALKER, M.A.

NOEL G. TERRY, M.B.E., J.P.

MRS. DERWAS CHITTY, M.A.,

G. S. HUGHES, F.R.C.S., J.P.

F.S.A.

E. WILFRED TAYLOR, C.B.E.,

J. STUART SYME, F.R.I.B.A.

F.R.A.S., F.R.M.S.

OLIVER SHELDON.

E. M. RUTTER.

H. E. HARROWELL, O.B.E.,

J. B. MORRELL, J.P.

J.P.

NEVILLE VEAR.

Hon. Treasurer:

J. L. BROCKBANK, M.A.

Keeper of the Museum and Acting Hon. Secretary :

R. WAGSTAFFE, M.B.O.U.

Committees :

General Purposes and Finance Committee :

ALD. W. H. BIRCH.	A. W. PING.
J. L. BROCKBANK.	REV. A. RAINE.
GERALD S. HUGHES.	E. M. RUTTER.
T. GOULTON LEONARD.	SIR FRANCIS W. TERRY.
SIDNEY MELMORE.	GEOFFREY THOMPSON.
J. B. MORRELL.	COL. INNES N. WARE.

Garden Committee :

C. ALLEN.	A. W. PING.
J. L. BROCKBANK.	K. E. T. WILKINSON.
G. S. HUGHES.	E. M. RUTTER.
J. A. KNOWLES.	N. G. TERRY.

Museum Committee :

CHARLES ALLEN.	ARTHUR SMITH.
MISS E. BRUNSKILL.	J. STUART SYME.
MRS. DERWAS CHITTY.	E. WILFRED TAYLOR.
W. D. HINCKS	GEOFFREY THOMPSON.
SIDNEY MELMORE.	J. F. E. GELSON WALKER.
A. W. PING.	NEVILLE VEAR.
E. M. RUTTER.	

The President, the Hon. Secretary, Hon. Treasurer, and the Keeper are *ex-officio* members of all Committees.

York and District Field Naturalists' Section.

Officials elected April, 1946:

President :

A. WENTWORTH PING, M.A., F.R.Met.Soc.

Vice Presidents :

R. WAGSTAFFE.
S. COOPER.

F. SMALLEY.
STANLEY ALLEN.

Hon. Secretary :

KENNETH G. PAYNE, A.R.C.S., B.Sc.
123 The Mount, York.

Hon. Treasurer :

A. COLLEY,
The Yorkshire Museum, York.

The Annual Subscription to the Section is five shillings. Membership is open to both members and non-members of the Yorkshire Philosophical Society. Members of the Yorkshire Philosophical Society are cordially invited to the lectures.

REPORT OF THE COUNCIL

OF THE

YORKSHIRE PHILOSOPHICAL SOCIETY

8th APRIL, 1946.

GENERAL REVIEW.

UNQUESTIONABLY the most significant event of the past year was the cessation of the war, first in Europe, and later in the Far East, leading to the return of a semblance to normal peace-time conditions, such as an Institution of this kind must have in order that its cultural activities may be pursued to the fullest possible extent.

When we look back over the five distressing years during which our activities were severely restricted, our first reaction is one of relief and great thankfulness that the Museum, which is the heart and soul of the Society, was spared the devastation which was suffered by many similar institutions in the country. We cannot, therefore, let this opportunity pass of extending our sincere sympathies to those bodies which have fared less well than ourselves, and it should be one of our more immediate aims to give help wherever we can in the long process of rehabilitation. Our Society is deeply indebted to all those voluntary workers who came readily to our assistance during those troubled times, particularly after the sharp raid on York in the early hours of 29th April, 1942, when a bomb fell in the Museum grounds which not only destroyed the foundations of the central apse of the eastern termination of the Norman Abbey Church, but also did considerable damage to the Museum building. The remains of the later Abbey, however, which were restored some years ago by the Society—partly by subscription, but mainly from the Society's own funds, fortunately withstood the effects of the blast.

Thus it is that the termination of the war finds us in a comparatively prosperous financial position with a steadily increasing membership and a stronger financial position than for many years. It is our duty now to press on as vigorously as circumstances will permit with the work of re-organisation which your Council has planned and is determined to put into effect at the earliest opportunity. War damage repairs to the roof and windows have been effectively carried out under the supervision of Mr. J. Stuart Syme, the Society's architect, and the Museum fabric will soon be in sound condition again.

For many years the Museum has felt the acute need for an up-to-date Laboratory in which the routine work of preservation and repair of exhibits can be carried out under ideal conditions, and in which the many varied objects which are now sent to your Museum for naming and description may be critically examined and determined. The need for a dark-room, where the photographic work of the Museum can be undertaken, has also been felt. Happily our finances now permit of the installation of these essential depart-

ments, and indeed their completion is only delayed by the present governmental restrictions on expenditure. When these primary needs are fulfilled the Yorkshire Museum will be one of the best equipped in the country, and the general work of re-arrangement and display of both exhibition and study material will proceed at a much greater rate than has been possible hitherto.

It must not be thought, however, that the lack of a scientifically-equipped laboratory has prevented the continuance of normal Museum work, for throughout the war period, and more particularly during the year just past, the collections have been extended in every possible way, and the preservation and incorporation of new acquisitions has been carried out effectively, if slowly and often under most trying circumstances. The results of this labour are not yet apparent except in the study collections, which are, for the most part, hidden from the view of the general public, but they will gradually manifest themselves as and when our gallery cases are modernised, and new exhibitions installed. A great step forward has already been made in putting in hand the rebuilding of the wall cases in the Mammal Room, and again only official restrictions prevent the work being speedily completed.

In order to expedite the plans which the Council has made for the Society's future, and in order to increase the value of the Society's participation in cultural and educational activities in the North, your Council has under active consideration the appointment to the permanent staff of a fully-qualified archaeologist to take charge, under the Keeper, of the valuable and extensive Prehistoric, Roman and Mediaeval Collections housed in the Museum. This important appointment will soon be made, and that it will prove of obvious benefit to the Society in every way cannot be too strongly emphasised. Your Council cannot leave this matter without expressing its most sincere thanks to Mrs. Derwas Chitty, who, as Honorary Curator of Archaeology, has been of immense service throughout the whole period of the war, and whose expert help and advice will be greatly missed now that she has left the North to assist her husband in his duties as Rector of Upton, near Didcot, Berkshire. Your Council is glad to say that Mrs. Chitty still maintains the liveliest interest in the affairs of the Society.

In her absence the Society has received the greatest help from Mr. Ian A. Richmond, of King's College, Newcastle-on-Tyne, and this assistance was particularly welcome when the archaeological material was brought back from its war-time home. Mr. Richmond then personally re-arranged most of these exhibits in the Hospitium, and although his innumerable other duties prevented the completion of the task, the new archaeologist (when appointed) will find his responsibilities in this connection considerably lightened.

In addition to the archaeological material, the evacuated pottery has been returned to the Museum, and re-instated in the Central Hall, where it has been re-arranged for exhibition by Mr. Colley, and other members of the staff. The valuable Natural History books and specimens, including the Fossil types and extinct Birds, are also back in the building. Your Council is more than grateful to all those who, at considerable inconvenience to themselves, most willingly undertook to act as temporary guardians of our treasures. Without their co-operation much that is irreplaceable would have had to undergo the risk of total destruction, and it is with a firm sense of gratitude that your

Council acknowledges the help of the following: Sir Francis Terry, the Chairman and Members of the Keswick Museum Committee, the Chairman and Members of the Committee of the Ruskin Institute, Coniston, and Mrs. Ogden, of Grange-in-Borrowdale, in Cumberland.

Although there has been no single acquisition of any special note during the year under review, a great deal of useful material, particularly in the Natural History department, has been added to the fast-growing study collections. Indeed the flow of specimens has been so great that it has been quite impossible to cope with the heavy task of determination and incorporation, and much of the new material still requires attention when more time is available for critical examination. It is very gratifying to note that increasing use is being made of our splendid reference collections in all branches of Natural Science. In particular, many Fossils have been examined by Professor T. Harris, who holds the Chair of Botany at Reading University, and he has described a number of these as new to science. Our collection of Fossil types must now be one of the finest in any provincial Museum, and it is appropriate here to record our thanks to Mr. Sidney Melmore, who has prepared an excellent catalogue of them and the figured specimens, which is shortly to be published in *The North-Western Naturalist*.

The distinguished Editor of this journal, Mr. A. A. Dallman, A.L.S., F.C.S., is at present assisting at the Museum in incorporating new material into the Herbaria, and he hopes to be of considerable help to us in instituting a botanical gallery, a novel feature for this institution. Your Council is also glad to welcome Mr. Kenneth Williamson, who, in order to further his training—which was interrupted five years ago by service with the Armed Forces—has become temporarily attached to our Museum, where already his knowledge and enthusiasm are proving of great value to your Council's policy of re-organisation.

Mr. W. D. Hincks, the Honorary Curator of Entomology, has continued to make the fullest use of the appropriate literature in the possession of our Library in his joint work with Mr. G. S. Kloet on "A Check-List of British Insects." This invaluable compilation, which embraces all Orders of British Insects, is fast nearing completion. Mr. Hincks has also found time to assist the British Trust for Ornithology, through the medium of the Museum, by carrying out researches into the food of the Rook, thus providing important information for the Trust's enquiry into the economic status of this bird.

As in the past, the Honorary Curators figure prominently among those whom your Council desires to thank for their assistance and willing co-operation with the Keeper; the value and importance of their help can be seen from the various reports, which now appear as part of the Transactions of the Society.

Your Council desires to thank the following institutions for their interest in the affairs of the Society, and their willingness to help whenever approached: The British Museum (Mr. John Allan, Keeper of the Department of Coins and Medals), the British Museum of Natural History (N. B. Kinnear, Keeper of Zoology, and J. A. Macdonald of the Bird Room), the Glasgow City Museum and Art Galleries (Curator of Natural History, R. G. Absolom), the Hancock Museum, Newcastle-on-Tyne (Honorary Secretary, G. W. Temperley), Leicester

Museum and Art Gallery (Director, Trevor Thomas), Liverpool Public Museums (Acting-Director, R. K. Perry), The Manchester Museum (Director, R. U. Sayce), the Royal Botanic Gardens, Kew (Curator, D. W. Campbell), the Royal Scottish Museum (Keeper of Zoology, A. C. Stevens), the Stockport Museum (Curator, R. C. Sansome), the Victoria and Albert Museum.

In addition, the following persons, among others, have been of service to the Museum during the year, and your Council is pleased to express its gratitude: Messrs. G. H. Ainsworth, J. Lord and C. F. Procter (Hull), Mr. Hubert Barrow (Leicester), Mr. W. G. Bramley (Pallathorpe), Mr. Harry Britten (Manchester), Lieut. R. H. Broughton (Leicester), Sir Charles Richmond Brown (Kirbymoorside), Comdr. Cooper (Pickering), Mr. W. S. Cowin and Mr. and Mrs. A. H. Karran (Isle of Man), Mr. J. C. Dickinson (Leeds), Dr. F. W. Dwelley (the Very Rev. the Dean of Liverpool), Mr. Ian Fraser (Islay), Mr. A. Gordon (Helmsley), Dr. B. E. M. Hobby (Oxford), Mr. Eric Hosking (London), Mr. A. E. Jolley (Leicester), Mr. G. J. Kerrich (Manchester), Mr. S. D. Knox (Spurn Head), Miss Lilly (C.E.M.A., London), Col. R. Meinertzhagen (London), Mr. K. G. Payne (York), Fr. Niels Petersen (Nólsoy, Faroe Islands), Mr. Harry Rogers (Isle of Man), Mr. W. F. J. Rosenberg (London), Mr. Stuart Syme (York), Professor Hamilton Thompson (Leeds), Mr. N. Vear (York), Mr. Brian Vesey Fitzgerald (Editor, "The Field").

MEMBERSHIP.—The Membership of the Society continues to rise steadily, a gratifying reflection that, despite the restrictions placed on our activities by the difficulties of the time, the Society is still very much alive. The total Membership now stands at 415, as against 380 in 1944—a net increase of 35. Whilst this is most satisfactory there can be no doubt that, with the re-introduction of sectional activities when times become more settled, this figure will be easily surpassed. The Student Membership, established last year, has not been the success that it might have been in more normal times, since the class of people this new provision was designed to attract is being absorbed by the Armed Forces or in other forms of National Service. Whilst there is as yet little to show, however, for the provision of this new category, your Council feels that it would be a mistake not to persevere with this potentially valuable innovation.

During the year your Council was pleased to elect Mr. I. A. Richmond, M.A., F.S.A., of King's College, Newcastle-on-Tyne, an Honorary Member in recognition of his distinguished services to Roman archaeology, and also for the invaluable work he has accomplished on our behalf.

LIBRARY.—The most notable acquisitions during the year were a number of works on Astronomy, presented by Mr. Neville Vear, the Honorary Curator of Astronomy, and Millais' famous work in three volumes on "The Mammals of Great Britain and Ireland." Although it is salutary to record that the Library is rich in the earlier scientific and archaeological works, many of which are almost unobtainable to-day, the Council desires to re-emphasize the fact that modern works in these subjects are not so well represented; and although your Council will continue to purchase the best of these, as and when they become available, any help (similar to Mr. Vear's) that Members may be able to give will be much appreciated.

Some progress has been made during the year in the provision of new shelving as part of the plan to concentrate all the books in the Museum in this department, so as to relieve space in the Students' Room and General Office, where many books are temporarily housed, for more legitimate purposes. In the future there can be no doubt that one of the greatest problems we shall have to face will be Library accommodation, and although it is intended to carry the central fixtures to the ceiling, the shelf accommodation thus gained will provide only a temporary relief. Nevertheless, this innovation should tide us over one or two years, until such time as the Society can afford to extend the Library, and perhaps incorporate a Members' Lounge where informal discussions may be held, and tea and coffee served. It is very desirable that the social side of the Society should be considered in the scheme of re-organisation, and it is your Council's hope that the day when this ambition will be realised may not be long delayed.

LECTURES AND FILMS.—Throughout the period of the war your Council was pleased to allow the general public free access to the Society's Winter programme of Lectures and Films given in the Tempest Anderson Hall. It is gratifying to note that the attendance at these Meetings has progressively increased. Your Council, however, is considering the introduction of a small charge to non-members of the Society in order to defray the considerable costs occasioned by the engagement of suitable lecturers, for now that the Society is embarking upon a programme of re-organisation and extension of the facilities afforded by the Museum, it is desirable that subsidiary services of this character should be self-supporting. It is felt that public appreciation of the Lectures is such that the imposition of a small charge will in no way impair the good attendances: indeed, your Council feels that the public will welcome the opportunity of making some small but helpful contribution to the financial resources behind the Society's educational work.

It is intended in future to continue the policy of striking a happy balance between natural history and archaeology, the two subjects with which our Society is most intimately concerned, in planning the Lecture programmes. Experience showed that the Syllabus for 1945 was a well-balanced one, and served once more to emphasize the fact that talks and films on the open air and wild life hold first place in popularity. The programme during the past season was as follows:—

Wednesday, 7th February—NATURAL HISTORY FILMS.

Saturday, 17th February—"SCIENCE AND CRIME" (with exhibits).

By R. S. Sansome, F.S.A. Scot.

Monday, 12th March—"MARCH OF TIME" FILMS.

Saturday, 14th April—"ALCUIN AND EUROPEAN CIVILISATION."

By Philip Grierson, M.A.

Saturday, 28th April—"SPOTLIGHT ON THE CATHEDRAL ROOF."

By C. P. Cave, F.S.A.

Saturday, 5th May—"POPULAR CUSTOMS AND SUPERSTITIONS."

(Folk-lore Circle, presided over by the Rev. E. O. James, Professor of History and Philosophy of Religion in the University of Leeds).

9th May to 30th May—"BREUGHEL." C.E.M.A. Exhibition of Reproductions.

Saturday, 27th October—"OUR NATIVE ALPINE PLANTS."

By J. Grant Roger, B.Sc. (Keeper of Botany, Manchester Museum).

Saturday, 17th November—"THE LIVERPOOL CATHEDRAL."

By the Rev. Canon Charles F. H. Soulby, M.A.

Saturday, 1st December—GEOGRAPHICAL FILMS.

Saturday, 15th December—"THE ROMANCE OF BIRDS."

By Eric Hosking, F.R.P.S., M.B.O.U.

SUMMER SCHOOL.—A Summer School on "The History of the Parish Church" was held between Friday and Sunday, 25th-27th May, 1945, under the auspices of this Society. The Lecturers and Tutors were Professor Hamilton Thompson, M.A., D.Litt., Mr. J. Stuart Syme, F.R.I.B.A., and Mr. J. C. Dickinson, M.A. About 30 people attended, each contributing an inclusive fee of £1 to cover expenses. Professor Hamilton Thompson dealt with the "History of the Parish Church," "Evolution of the Fabric of the Parish Church," "The Services in the Parish Church," and "Fittings and Furniture of the Parish Church." On the Saturday and Sunday several churches in the City were visited under the expert guidance of Mr. J. Stuart Syme; and Mr. J. C. Dickinson conducted a visit to a special exhibition of pictures and plans of Churches, which he had arranged with particular care in the Hospitium. Your Council is very grateful indeed to all those who took part and helped to make the School the success it was.

This was the third Summer School to be held under the auspices of our Society. Each of these has been a great success, and immensely profitable to all those who took part. Your Council feels so convinced of the usefulness of this (for us) entirely new innovation, that everything possible will be done to hold at least one Summer School each year on a particular subject embraced by the Society's interests. Provisional plans have already been made to hold one on the close relationship between Field and Museum Ornithology, as soon as the new Laboratory is completed. This will be in response to many requests for some guidance on the more scientific approach to birds.

EXHIBITION.—Owing to the pressure of other work time did not permit of more than one exhibition being held in 1945. As in previous years, this was arranged with the close co-operation of C.E.M.A., and comprised a display of 25 coloured reproductions of the work of Peter Breughel the elder, "Peasant Breughel," who lived 1530-1569, mainly in Antwerp. The exhibition was held in the Hospitium and no charge was made for admission. It was well supported, and there was a good attendance at the lecture on "the Artist and his Work" which was given by Miss Lilly on Monday, 14th May.

GARDENS.—One of your Council's first appointments in the coming year will be that of a Kew-trained Gardener to work under the Keeper, on plans to be formulated by the Garden Committee. One of his first duties will be the rehabilitation of the Herb Garden and Order Beds situated behind the Hospitium, which were attractive and educational features some years ago. Your Council has given much attention to this appointment, in pursuance of its

policy for making the grounds a Botanical Garden in the truest sense, as well as a park for lighter activities. Ornamental shrubs which are urgently required are almost impossible to obtain at the present time from the usual suppliers, and the Council again expresses its hope that Members will respond, as in previous years, to its request for cuttings or any other duplicate material they may be able to spare.

OBITUARIES.—Dr. Frank Elgee, who was elected an Honorary Member of the Society in 1936, died on 7th August, 1944, at the age of 63. Although he suffered ill-health throughout almost the whole of his life, his fine spirit and cultured intellect together enabled him to conquer this adversity, and he achieved a position of eminence in the studies of natural history and archaeology such as few Yorkshiremen have been privileged to enjoy. His books, “The Moorlands of North-eastern Yorkshire” (London, 1912), and “Early Man in North-east Yorkshire” (Gloucester, 1930), will for long stand as models of their kind, and it is worth while quoting from the preface of the former work in order to show the hugeness of the task this enthusiastic and energetic student set himself :

“In this work I have gathered together the results of over fifteen years’ research into the botany, geology and zoology of the Eastern Moorlands of Yorkshire. So far as I am aware, it is the first English book which deals with the moors of a district from a scientific standpoint and which treats their varied phenomena as a coherent whole It may be as well to direct attention to certain sections of the work which deal with aspects and problems of the moors hitherto overlooked, or merely hinted at by earlier workers : the peat-beds and the evidence they yield as to primitive woodland on the moors; the relationship of the moorland fauna and flora to the glaciation of the district; the origin of the chief moorland land-forms . . . the fauna of the moors and its relation to the flora.”

Later Dr. Elgee pursued his researches into the Prehistory of the moorland region, in collecting the data for his second book, with the same thoroughness, patience and acumen which had earlier marked his studies of natural history. He was the Curator of the Dorman Memorial Museum, Middlesbrough, from 1923 to 1932, and in the following year was awarded an honorary degree of Philosophy by Leeds University in recognition of his brilliant work.

James Backhouse, a distinguished ornithologist, and for many years an active member of the Society, as well as one of its greatest benefactors, died at his home, Caer Fegla, Arthog, North Wales, on 1st January, 1945. When he became a member of the Society in 1886 he was already well-known for his contributions to our knowledge of Palaearctic birds, which had appeared as short papers in *The Ibis* and other scientific journals. In 1890 his studies of the avifauna of the Palaearctic Region culminated in the publication of “A Handbook of European Birds, for the use of Field Naturalists and Collectors” (London, Gurney and Jackson; York, William Sessions—pp. viii and 334). Having travelled much in Europe, to the Faroes, Iceland (with William Eagle Clarke), Corsica and France, he must often have experienced the need for a simple and concise guide of this kind, giving the distinctive characters, a brief

résumé of the breeding habits, and the geographical distribution of each species. His book supplied a great need, and was a standard work of reference for field-men and collectors alike until a very similar work, modelled on the same lines, was produced by Wardlaw-Ramsay in 1923.

In 1902 the large collection of bird-skins, representative of a wide range of species in the Palaearctic Region, and which Backhouse had used extensively in working on his book, was presented by him to the Society's Museum. Here it remains, in excellent condition, forming the nucleus around which our ever-growing collection is being built. A large and very fine collection of Shrikes was also presented: for many years James Backhouse specialised in this widespread and interesting group, and published several articles concerning it.

He was the Honorary Curator of Ornithology at this Museum from 1887 to 1921, and was four times a Member of the Council, *viz.*—1887-89, 1891-93, 1897-99 and 1919-21. He served also on the General Purposes and Finance Committee 1919-21, on the Museum Committee in 1922, and on the Centenary Executive Committee from 1922-24. In recognition of his splendid services to the Society, your Council was pleased to elect him an Honorary Life Member in 1922.

Sir John Arthur Ransome Marriott, M.A., who was elected an Honorary Member of this Society in 1925, passed away at his home at Llandrindod Wells, Radnor, in the summer of 1945. He was aged 85 years. He was a well-known historian, and formerly a Fellow and Lecturer of Worcester College, Oxford. He was Conservative M.P. for that City from 1917-22, and for York, 1923-29. He took an active part in the University Extension Movement, and for many years organised the Summer Meetings at Oxford. Sir John was a prolific writer, and among his better-known books are "The Mechanism of the Modern State," "The History of Europe," "The Evolution of the British Empire," and "The Crisis of English Liberty." His fine library of some three thousand volumes, for the most part on historical subjects, was presented to the York Public Library, where he was often to be seen at his studies during his residence in the City.

FIELD NATURALISTS' SECTION.

The Field Naturalists' Section has carried through a full programme during the year 1945-46. The summer was devoted to outdoor work, and lectures and demonstrations at the Museum resumed in October, and continued till the end of March.

The first visit of the year was to Huntington Woods on 9th May, and was blessed by sunshine, which brought good things to the entomologists and provided a fitting opening of the new season. Between then and 15th September, when the Annual Fungus Foray was held at Sand Hutton, there were seventeen other field meetings. With one exception the places chosen were within ten miles of York, and the bicycle was the usual means of transport. The exception was a visit to Ampleforth, to see something of the ecological associations of the Upland Heath under the guidance of the Rev A. D. Webb, of Ampleforth College.

Mr. E. W. Taylor opened the Winter Programme with an excellent public lantern lecture on "Birds of the Yorkshire Moorlands." During the period from then till the end of March seventeen meetings were held to hear talks or reports by members, or to see exhibits. These meetings were distributed among the various branches of Natural History as follows:—Ornithology, 5 meetings; General Exhibits, 3 meetings; Botany, Entomology and Mammals, 2 meetings each; Geology, Conchology and Freshwater Biology, 1 meeting each.

There are one or two occasions of which, perhaps, special mention might be made. On 16th December, we had an opportunity of hearing the President of the Yorkshire Naturalists' Union, Mr. W. D. Hincks, who kindly came over from Leeds to speak on Taxonomy and its problems. On 6th January, Dr. Gayner gave a noteworthy account of the life and work of Mr. Andrew Templeman, whose recent tragic death removed a man of great attainments from our roll of Honorary Members. The Presidential Address was delivered by Mr. A. W. Ping on Wednesday, 16th January, on "British Trees and Forestry," a topical subject chosen to interest the general public, who were invited to this meeting. Then, almost at the end of the Session, on 3rd March, members were treated to an outstanding demonstration at Archbishop Holgate's School, when Mr. Charles Allen explained and demonstrated precisely how to attain success in setting up an aquarium.

Thanks are once more due to the Keeper of the Museum for his great help, especially in the frequent exhibitions of material from the Museum collections, sometimes on a considerable scale. For instance, on 4th November, specimens of all the birds common in the York area were on view, together with a fine collection of books on ornithology, including valuable works of historical interest. Several meetings throughout the year have illustrated the fruitfulness of combining the Museum and Systematic and Field points of view.

During December, a meeting of the Sectional Recorders of the Society was called, in order to co-ordinate and standardise the methods of keeping records of species in the different branches of Natural History. The use of card indices in addition to the present Recorders' Books was recommended and further recommendations made regarding proper systematic procedure.

The membership of the Society stands at 149, a net gain of 25 over last year, 38 new members being elected this year.

Undoubtedly, the outstanding event of the year, as far as the Field Naturalists have been concerned, has been the acquiring of Askham Bog as a permanent Nature Reserve. The most sincere thanks of all our members are due to Sir Francis Terry and to Alderman Morrell for making this possible.

The following are the localities which were visited on the Summer excursions:—Huntington Woods, Askham Bog, Bolton Percy, Haxby Ponds, Ampleforth, Clifton Ings, Claxton Brick Ponds, Stillingfleet, Allerthorpe Common, Hob Moor Ponds, Sand Hutton, the Foss at Huntington, Haxby Moor and The Hermitage.

The subjects and lecturers of the Winter Programme were as follows:—
 “Birds of the Yorkshire Moorlands,” E. W. Taylor, F.R.A.S., F.R.M.S.;
 General Exhibits; “Field and Museum Ornithology,” R. Wagstaffe;
 “Exhibition of Bird Skins,” R. Wagstaffe; “Salt in Boulder Clay,” S. Melmore,
 B.Sc.; Botanical Recorder’s Report and Herbarium Specimens, K. G. Payne;
 “Names and Things—Some Notes on Taxonomy,” W. D. Hincks, M.P.S.,
 F.R.E.S.; Conchological Recorder’s Report and Exhibits, C. F. Sweetman;
 General Exhibits; “British Trees and Forestry,” A. W. Ping, M.A.,
 F.R.Met.Soc.; Entomological Recorder’s Report and Exhibits, A. Smith;
 General Exhibits; “Bats, their Lives and their Structure,” E. W. Taylor and
 R. Wagstaffe; Ornithological Recorder’s Report, F. Jefferson; Demonstration
 of setting up an Aquarium, C. Allen; “Finches, a Survey of their Habits,
 Nesting and Systematics,” R. Wagstaffe and F. Jefferson; Report of Recorder
 of Mammals and Fishes, S. Cooper.

KENNETH PAYNE,

Hon. Sec. of the Section.

NEW MEMBERS, elected in 1945.

- Adkin, Mrs. L. 29 Union Terrace.
 Barton, G. O., 115 East Parade, Heworth.
 Beddison, Mrs. N., 72 Marygate.
 Blaess, Miss M., B.A., 49 Rosedale Avenue, Acomb.
 Boyes, Mrs. M. E., 9 Water End, Clifton.
 Brownbridge, Mrs., 37 Goodramgate.
 Busby, Miss P. E., 4 Bootham Terrace.
 Cairns, G. R., 15 Bootham Crescent.
 Chapman, Mrs. M. L., 45 Blossom Street.
 Corcoran, Mrs. E. A., St. Mary's Hotel, Bootham.
 Davies, Mrs. S. H., 4 St. Olave's Road.
 Dennis, Mrs. E., 55 Sycamore Terrace.
 Dobrashian, Mrs. M., 18 St. Mary's.
 Evans, Miss E., 22 Middlethorpe Drive, Dringhouses.
 Francis, A. C., "Sunnymead," Station Road, Copmanthorpe.
 Fryer, Mrs. E. E., 12 St. Mary's.
 Gray, Councillor T., "Kildonan," 284 Tadcaster Road.
 Halliday, C. B., 1 North Parade.
 Harrison, Mrs. D., 48 Sycamore Terrace.
 Heap, E. T., 180 Stockton Lane.
 Henderson, Mrs. M., 5 Longfield Terrace.
 Hill, W. W., The Boathouse, Lendal Bridge.
 Hindsley, Mrs. J. E., 41 Westminster Road, Clifton.
 Holman, Mrs. R., 23 Longfield Terrace.
 Huffam, Col. W. T. C., O.B.E., M.C., Yorkshire Club.
 Kettlewell, R. C., "Lincroft," 54 Shipton Road.
 Ledgard, E., 28 Market Street.
 Lewis, B., 21 Longfield Terrace.
 Linney, Miss. G., B.A., 12 St. Mary's.
 Lowley, H., 25 Bewlay Street.
 Naish, Dr., 18 St. Saviourgate.
 North, J. H., 94 Stockton Lane.
 Payne, K. G., "Townshend House," 123 The Mount.
 Pritchard, W., 25 Bishopgate Street.
 Pulleyn, Ald. J., Water End, Clifton.
 Randall, Miss H. C., A.R.C.S., B.Sc., 69 Petergate.
 Roberts, Miss G. E., 4 Bootham Terrace.
 Rouffignac, C. Danton de, 5 Flavian Grove, Rawcliffe Lane.
 Rowntree, Miss Faith S., 28 Clifton.
 Rymer, J. H., 35 St. Andrewgate.
 Shaw, Mrs. K. S., 85 Huntington Road.
 Smith, C. J., Bootham School.
 Spence, Miss M., B.A., 52 St. Olave's Road.
 Stewart-Smith, Rev. D. C., 10 Precentor's Court.
 Stoye, G., 9 Sycamore Terrace.
 Sutcliffe, E., 1B Clarence Street.
 Todd, Mrs. M. E., 17 St. Mary's.
 Trendall, Mrs. N., 20 North Parade.

Triffitt, R. E. L., B.A., A.M.I.C.E., 25 Middlethorpe Drive.
 Vero, Col. W., R.A.P.C., 80 Marygate.
 Waller, Mrs. D. A., 12 St. Mary's.
 Ware, J., "Clive House," 17 St. Olave's Road.
 Westbrook, Mrs. D., 8 Bootham Terrace.
 Whitelock, Mrs. E., 22 Bootham Terrace.
 Whitworth, W. A., 12 The Horseshoe, Dringhouses.
 Wicks, Mrs. B., 28 Hetherton Street, Marygate.
 Young, G., Cave Road, Elloughton, E. Yorks.

DEATHS.

Honorary Members.

Elgee, Frank, Ph.D., Weyhead, Basingstoke Road, Alton, Hants.
 Marriott, Sir John A. R., M.A., 17 Belgrave Square, London.

Members.

Backhouse, J., F.Z.S., Caer Fegla, Arthog, N. Wales.
 Blackburn, Ernest, "Vaynor," 45 Manor Drive, Acomb.
 Britton, Miss A. E., 6 Lady Hewley's Hospital, St. Saviourgate.
 Chapman, R. H., 45 Blossom Street.
 Daykin, Arthur, 51 Wentworth Road.
 Derby, Miss C. A., "Grey Gables," 7 Water End, Clifton.
 Potter, Miss G. E., 16 Fulfordgate, Heslington Lane.
 Saville, W. P., 4 Goodramgate.
 Tait, Miss L. M., 18 Longfield Terrace, Bootham.
 Wolstenholme, G. J., "St. Catherine's," 11 Clifton.

Lady Subscribers.

Noble, Miss J. M., 6 Duncombe Place.
 Warneford, Miss M., 9 Queen Anne's Road.

DEATHS AND RESIGNATIONS.

Honorary Members	...	...	...	...	2
Members	...	...	...	...	20
Lady Subscribers	...	...	...	...	3
Ticket Holders	...	...	...	...	4
					—
					29
					—

NEW MEMBERS.

Honorary Members	...	...	...	...	1
Members	...	...	...	...	57
Ticket Holders	...	...	...	...	6
					—
					64
					—

TOTAL MEMBERSHIP ON 31st DECEMBER, 1945.

Honorary Members	...	...	...	...	23
Members	...	...	...	...	351
Lady Subscribers	...	...	...	...	10
Associates	...	...	...	...	2
Student Members	...	...	...	...	2
Ticket Holders	...	...	...	...	27
					<hr/>
					415

Dr.		THE YORKSHIRE PHILOSOPHICAL SOCIETY.				INCOME		
31st Dec., 1944				EXPENDITURE.				
£	s.	d.	£	s.	d.	£	s.	d.
			To Salaries and Wages :					
1323	15	3	Museums	...	...	1323	18	5
529	13	7	Lodge and Gardens	...	...	522	4	6
300	0	0	Staff Pension	...	...	300	0	0
38	2	2	National Health and Unemployment Insurance	...	...	32	0	0
240	10	0	Fire Watchers	...	...	—
2432 1 0						2178 2 11		
			To Maintenance of Properties and Land :					
99	19	8	Rates	...	...	73	0	8
206	3	1	Heating, Lighting and Water	...	...	270	16	3
2	11	6	Museums—Repairs	...	...	21	15	11
			General Expenses :					
148 8 0			Museums	...	...	123	8	7
49 10 7			Gardens	...	...	80	15	2
8 9 10			Bowling Green	...	...	2	17	6
76 14 4			Estate	...	...	59	3	8
283	2	9				266 4 11		
591 17 0						631 17 9		
			To Miscellaneous Expenses :					
92	3	7	Books, Printing and Stationery	...	...	113	12	8
42	12	4	Insurance	...	...	32	13	9
40	1	6	War Damage Contribution on Properties	...	...	40	1	6
52	9	11	Telephone and Postages	...	...	66	4	8
227 7 4						252 12 7		
			To Lectures and Exhibitions—					
89	15	5	Fees and Expenses	...	...	70 14 9		
			To Additions :					
			Library	...	...	25	8	2
			Museum	...	...	6	6	6
21	11	2				31 14 8		
18	8	4	To Subscriptions Irrecoverable...			6 15 0		
			To Balance being Excess of Ordinary Income over Ordinary Expenditure for year, carried down			914 13 9		
701	6	6						
£4082 6 9						£4086 11 5		
			To Extraordinary Expenditure :					
			Roof Repairs	...	...	94	9	6
			Laboratory Equipment	...	...	64	18	3
			Museum and Library Cases	...	...	49	12	4
			Carriage—Return of Specimens	...	...	41	2	10
			Meteorology—Renewals	...	...	20	5	2
						270 8 1		
			To Balance being Excess of Income over Expenditure for year, carried to Balance Sheet			644 5 8		
						£914 13 9		

Dr.

INCOME AND EXPENDITURE ACCOUNTS

31st Dec., 1944.

EXPENDITURE.

Wm. REED

\pounds	s.	d.								\pounds	s.	d.
26	4	11	To New Books and Binding...	...	...	...	...	...	...	27	0	6
										<hr/>		
										\pounds 27 0 6		
										<hr/>		

H. J. WILKINSON

\pounds	s.	d.								\pounds	s.	d.
6	16	3	To Balance, being Income, carried to Balance Sheet	...	...	...	...	...	...	6	16	3
										<hr/>		
										\pounds 6 16 3		
										<hr/>		

SPECIFIC PURPOSES.

For the Year Ended 31st December, 1945.

Cr.

31st Dec., 1944.

INCOME.

BEQUEST.

<i>£</i>	<i>s.</i>	<i>d.</i>		<i>£</i>	<i>s.</i>	<i>d.</i>
23	3	8	By Interest on £579 12s. 5d. 4% Consolidated Stock (Gross) ...	23	3	8
0	10	3	By Bank Interest ...	0	8	9
2	11	0	By Balance, being Excess of Expenditure over Income, carried to Balance Sheet ...	3	8	1
<u>£26 4 11</u>				<u>£27 0 6</u>		

MEMORIAL FUND.

<i>£</i>	<i>s.</i>	<i>d.</i>		<i>£</i>	<i>s.</i>	<i>d.</i>
6	11	6	By Interest on £164 8s. 6d. 4% Consolidated Stock (Gross) ...	6	11	6
0	4	9	By Bank Interest ...	0	4	9
<u>£6 16 3</u>				<u>£6 16 3</u>		

THE YORKSHIRE PHILOSOPHICAL SOCIETY.

LIABILITIES.

31st Dec., 1944.											
£	s.	d.		£	s.	d.		£	s.	d.	
				Capital Account.							
44508	0	7		Balance at 1st January, 1945				44508	0	7	
64	15	0		Subscriptions paid in advance				77	12	6	
85	3	9		Sundry Creditors				315	14	7	
				Income and Expenditure Account.							
				Balance at 1st January, 1945				1405	0	7	
				<i>Add:—</i> Excess of Income over Expenditure							
				for the year ended 31st December,							
				1945				644	5	8	
1405	0	7						<hr/> 2049 6 3			

BALANCE SHEET, AT 31st DECEMBER, 1945.

ASSETS.

31st Dec., 1944.

£ s. d. £ s. d.

£ s. d.

£ s. d.

Freehold Property and Land.

Museum Gardens.

32 and 34, Bootham (Tempest Anderson Bequest).

St. Mary's Lodge.

Baths Cottage, Marygate.

10 Bootham.

Not valued
for the
purposes
of this
Balance Sheet.

Investments (at cost).

TEMPEST ANDERSON BEQUEST.

10183	8	9	£10,271 1s. 8d. 3½% War Stock	...	...	10183	8	9
4039	4	0	£4,500 3% Local Loans	...	...	4039	4	0
953	0	6	£900 Rotherham Corporation 5% Redeemable Stock, 1948-58	...	...	953	0	6
634	12	0	£600 Birmingham Corporation 5% Redeemable Stock, 1946-56	...	...	634	12	0
7968	14	6	£8,000 New Zealand Govt. 4% Inscribed Stock, 1943-63	...	...	7968	14	6
8131	9	0	{ £5,700 L. & N.E. Railway 4% 1st Prefce. Stock £2,500 L. & N.E. Railway 4% 2nd Guar. Stock }			8131	9	0
7967	11	0	£3,219 3s. 5d. Bank of England Stock			7967	11	0
1434	16	6	£1,200 Great Western Railway Co. 4% Debenture Stock	...	...	1434	16	6
1500	0	0	£1,500 2½% National War Bonds 1951/53	...	...	1500	0	0

RAWDON BEQUEST.

850	0	0	£850 2½% National War Bonds (1949-51)	...	850	0	0
-----	---	---	---------------------------------------	-----	-----	---	---

ST. QUINTIN BEQUEST.

250	0	0	£247 11s. 2d. 3½% Conversion Stock	...	250	0	0
-----	---	---	------------------------------------	-----	-----	---	---

WM. DOVE BEQUEST

500	0	0	£500 3% Defence Bonds	...	500	0	0
-----	---	---	-----------------------	-----	-----	---	---

44412 16 3

Note—Market value at 31st December, 1945, £47,535 15 5

44412 16 3

203 18 7

Sundry Debtors (including £241 19s. 6d. due from War Damage Commission for Repairs)

278 13 0

Suspense Account (Ellis Collection)—

Amount expended ... 500 0 0

Deduct:—Subscriptions received to date ... 220 0 0

280 0 0

Cash at Bank—

95	4	4	Midland Bank, Ltd. (Capital Account)	...	95	4	4
591	13	3	Do. (Current Account)	...	1105	13	4
759	7	6	York County Savings Bank	...	778	7	0
1446	5	1			1979	4	8

£46062 19 11

Carried forward...

£46950 13 11

THE YORKSHIRE PHILOSOPHICAL SOCIETY.

31st Dec., 1944.						LIABILITIES.								
£	s.	d.	£	s.	d.			£	s.	d.	£	s.	d.	
460	62	19	11			Brought forward	469	50	13	11

FUNDS FOR SPECIFIC PURPOSES.

WM. REED BEQUEST.

752	7	6	Balance at 1st January, 1945	...	...	...	749	16	6
			<i>Less :—</i> Excess of Expenditure over Income for						
			the year ended 31st December, 1945						
							3	8	1
749	16	6							

H. J. WILKINSON MEMORIAL FUND.

229	13	1	Balance at 1st January, 1945	...	...	...	236	9	4
			Add:—Income for the year ended 31st								
			December, 1945	...	...	...	6	16	3
236	9	4							243	5	7

£47049	5	9	£47940	7	11
--------	---	---	--------	---	----

REPORT OF THE AUDITOR TO THE MEMBERS OF

I have examined the foregoing Balance Sheet and Income and Expenditure Accounts with have verified the Cash Balances and Investments.

8, Coppergate, York.

7th March, 1946.

FORM
OF A
BEQUEST TO THE SOCIETY.

Every person desirous of bequeathing to the Society any sum of Money, Specimens, Books, Instruments, or other Property, is requested to make use of the following form:—

*I give and bequeath to the Trustees, for the time being, of the Society established at York, called “**The Yorkshire Philosophical Society,**” for the use of the said Society, the sum of _____ to be paid out of such part of my personal estate as I may legally charge therewith. [Or here enumerate the effects or property intended to be bequeathed.] And I direct that the receipt of the Treasurer of the said Society, for the time being, shall be an effectual discharge to my Executors for the said legacy.*

TRANSACTIONS
OF THE
YORKSHIRE PHILOSOPHICAL SOCIETY,
1946.

HONORARY CURATORS' REPORTS.

ROMAN ANTIQUITIES AND ETHNOLOGY.—Hon. Curator, Mrs. D. J. Chitty,
M.A., F.S.A.

The two main events of 1945 in the Archaeological Departments of the Museum were the Summer School on the History of the Parish Church, and the return of the Roman Collection and other archaeological treasures from their war-time refuges.

The Summer School, which took place in May, was the second of its kind held in the Yorkshire Museum, but the first for which the Yorkshire Philosophical Society took entire responsibility. The venture was emphatically justified by its success. The programme followed the lines of the first, with slight modifications, and we owe a great debt of gratitude to those whose work behind the scenes made it run so smoothly, notably Miss F. E. Wright, Miss V. Rodgers, and the Museum Staff. It was felt desirable that a topic mainly medieval in scope should follow the Roman subject of the first year, and "The History of the Parish Church" seemed particularly suited to a city as rich as York in old parish churches.

Professor Hamilton Thompson was the obvious choice for a Tutor, and most generously did he give us of his profound and detailed knowledge, dovetailing the facts about buildings and documents into one fascinating story. He did not despise details of furniture and decoration, and, best of all, presented a vivid picture of the use of the buildings. Each lecture was followed by a barrage of questions.

The Professor's lectures were profusely illustrated by lantern slides, but in addition students visited half a dozen actual examples under the expert guidance of Mr. Syme. By the kind permission of the Yorkshire Archaeological Society, we were also enabled to exhibit in the Museum a magnificent series of ground plans of Yorkshire Churches made by the late Mr. S. D. Kitson. Photographic and other material was also lent for exhibition by Mr. Syme and Mr. C. P. Cave. Mr. J. C. Dickinson described the exhibits to the school, with special reference to the local archaeological problems involved. This exhibition ran concurrently with the not incongruous C.E.M.A. exhibition of Breughel reproductions.

The Ormside Bowl and the Roman Lady's Hair have been returned to the Museum, but a permanent place for their exhibition has not yet been chosen. In September we were fortunate to secure the services of one of the most distinguished scholars of Roman Britain, Mr. I. A. Richmond, M.A., F.S.A., to unpack and make a preliminary arrangement of the Roman collections.

He gave his time and skill on singularly generous terms. Mr. Richmond's services were only limited by the short time at his disposal, but as during the year your Hon. Curator of Roman Antiquities had to leave York and take up residence in the south, there was no special member of the permanent staff to assist him or to execute his instructions after his departure, although we owe considerable thanks to volunteers from this Society and from the Roman Antiquities Committee of the Yorkshire Archaeological Society, who worked under Mr. Richmond during his visit. Until a permanent archaeologist is secured, it will be very difficult to display the Roman material satisfactorily, and unfortunately up to date it has not been possible to throw open the Roman collections to the general public.

Archaeological and historical lectures in the spring and autumn sessions of 1945 included a feature which again proved to be very popular—a lecture by Professor James on folk-lore, followed by discussion. His topic was Calendar Customs. Mr. C. P. Cave, F.S.A., gave a fascinating lecture on carved medieval roof bosses, illustrated by his own superb photographs. The title was literally exact: "Spotlight on the Cathedral Roof." An interesting lecture by Mr. Philip Grierson on "Alcuin and European Civilization" continued our policy of trying to present historic York figures before a York audience against their general and universal background, not concentrating on their local features. The tragically sudden death of Dr. V. Burch deprived us of a lecture that promised to be original—a study of the origins of Christian art.

Accessions have not been many, but two received by the Roman department are of interest. A cinerary urn and its contents originally discovered in the Railway excavations at York was presented by Major Anstey, Chief Constable in Belfast. He rescued it from a derelict private collection in Ireland. (After the death of the collector, hooligans had actually scattered the contents of the collection out of the window, and Major Anstey and his daughter collected fragments.) A set of lead sealings from Brough-under-Stainmore, presented by your Honorary Curator in memory of her father, add considerably to those from the same site, and elsewhere, that the Society already possesses. The sealings came to Lt.-Colonel E. Kitson Clark from his father, and they were given to Professor Clark by Chancellor Ferguson, the famous north-country antiquary.

Perhaps this is not really the place to mention a fine collection of modern pottery and glass given by Miss Lund.

MEDIAEVAL ARCHITECTURE.—Hon. Curator, Mr. J. Stuart Syme, F.R.I.B.A.

During the past year other claims on the time of those concerned with the care of this collection have made it impracticable for anything to be done in the way of the re-arrangement of the exhibits which was foreshadowed in the proposals submitted to the Council last year. It is hoped, however, that an opportunity of commencing this important work will be found during the summer or autumn. The first step will be the segregation of many of the duplicate pieces which are not of great value to the student or interest to the ordinary visitor. Suggestions as to the disposal of redundant items will, however, be made to the Council before any are removed from the Museum.

Pieces which can be grouped so as to form a definite structural feature will be retained. Special attention will be directed to the remains of the vestibule of the Chapter House of the Abbey, and an effort will be made to enable this valuable and interesting item to be seen to greater advantage than at present. The investigation of certain features on the site of the Abbey was continued with the enthusiastic help of scholars of Bootham School. An attempt was made to learn something of the course of the precinct wall on the south side of the Manor Shore. On the plans drawn by Samuel and Isaac Sharp to show the excavations of 1827-28, this wall appears to be continued up to the face of the Roman wall. The foundation of the precinct wall, which is probably of thirteenth or early fourteenth century date, was traced eastwards to a point where it terminated in a corner pier or the jamb of a gateway some 50 feet distant from the City wall. In the intervening space we encountered what appeared to be modern foundations bearing some resemblance to what is shown on the plan for an entrance lodge prepared by S. T. Andrews in 1844. It may be that mediaeval foundations were removed when these later ones were inserted. It seems to me to be more probable that Sharp's plan was based to some extent on an assumption, and that the old wall terminated at the corner pier above mentioned. It is hoped to investigate this matter further at a future date.

COINS AND MEDALS.—

Hon. Curators { Mr. Geoffrey Thompson, M.A., F.S.A.
Mr. J. F. E. Gelson Walker, M.A.

The return of all our coins from their war-time seclusion has enabled the Curators to complete the re-arrangement and replacements which were interrupted in 1939. Additions, including a number of unusual shapes, especially Yorkshire, have been made to our Seventeenth Century Tokens by gift or purchase, and by exchange with Mr. Horace Hird, President of the Yorkshire Numismatic Society, which he interpreted on generous terms. Our Eighteenth Century Copper Tokens and Nineteenth Century Silver Tokens are receiving close attention and gifts of rare varieties from Mr. Gelson Walker, and their general condition continues to improve.

With the courteous guidance of Mr. John Allan, F.S.A., Keeper of Coins and Medals, British Museum, we have arranged, and made available for reference, our "H. C. Barstow Indian Collection" (presented, 1922), of 332 Moghul Emperors, Gupta Dynasties, etc. (gold 62, silver 142, copper 128).

Our collections have been visited by the Yorkshire Numismatic Society and other collectors, and every effort is being made to popularise the study of coins by dealing with enquiries from the public, and in other ways to treat the Department on progressive educational lines.

VERTEBRATE ZOOLOGY.—Hon. Curator, Mr. E. Wilfred Taylor, C.B.E., F.R.M.S.

During the war years the structural damage sustained by the Museum, together with the lack of trained assistants, have combined to prevent continuous and intensive work in the public galleries, though much material has been prepared behind the scenes in anticipation of the re-arrangement of

the vertebrate exhibits. Work has, however, been continued on the ever-growing systematic collections and the sub-specific identity of some two thousand bird skins has been established. Much work still remains to be done.

During the year many specimens have been prepared on the premises, but this work has been rendered much more difficult owing to the incomplete state of the new laboratory. When these difficulties have been overcome, the Society will possess one of the best equipped Zoological laboratories in the country.

Up to the present, it has not been found possible to take active steps towards the establishment of the projected Aquarium in the Museum basement. The plans are ready to be put into effect as soon as materials are available. It is thought that the establishment of a department exhibiting live material will do much to enhance the popularity of the Museum, and that the returns will be out of all proportion to the initial cost.

The Collection of Bird Skins.

The past year has witnessed a further intensification of interest in the department's collections, and the identity of many specimens has been determined for scientific bodies and individuals. As the war difficulties are overcome, and these extensive collections are put into first-class order there can be no doubt that the Yorkshire Museum will become one of the most important centres for the study of the vertebrates, particularly of birds.

Of those who have assisted by generous donations, we are particularly indebted to Mr. W. H. Barrow, of Leicester, for continuous gifts of beautifully prepared bird skins, some of the utmost importance. Valuable gifts have also been received from our Honorary Member, Mr. A. Gordon, of Helmsley, and Mr. S. Fraser, of the Outer Hebrides. Messrs. K. Williamson and N. F. Petersen have presented examples of Faroe Island races, and we are indebted to Messrs. G. H. Ainsworth, J. Lord, C. F. Procter, R. M. Garnett, J. Edwards and Eric Hosking for individual skins received in the flesh. We have also exchanged material with Mr. Rosenberg, the British Museum, and the Kelvingrove Museum of Glasgow.

The Collection of Mammal Skins.

Again we are indebted to Mr. A. Gordon for a number of mounted specimens prepared in anticipation of the opening of the public gallery.

The Collection of Birds' Eggs.

Thanks to the devotion of Mr. E. M. Rutter, catalogues have now been prepared of the Howard, Rutter, and general collections of eggs. As a growth of mould was noted on some specimens, steps have been taken to prohibit this possibility in the future.

ENTOMOLOGY (excluding Lepidoptera).

Hon. Curator, Mr. W. D. Hincks, M.P.S., F.R.E.S.

In the early months of the year good progress was made in the re-arrangement of the Ellis collections. It was intended to remove the Hemiptera from the main Ellis cabinet and, utilizing the empty drawers thus

available, to re-arrange the Coleoptera so that the whole of the material of this order, forming the Ellis collection, could be housed in the single unit of 125 cabinet drawers. The Hemiptera were temporarily arranged in an empty cabinet provided by the Keeper in which it was hoped to incorporate our further material of this order.

Unfortunately this project has not been completed, but it is highly desirable that it should be effected with the minimum delay as satisfactory reference to the valuable Ellis collection is difficult until all the material is brought together in proper systematic order.

From August onwards, the Honorary Curator's energies had to be devoted, necessarily, to other duties, arrangements having been concluded for him to undertake the function of zoologist to the Rook Investigation of the British Trust for Ornithology, under the auspices of the Agricultural Research Council. This responsible work of national importance has entailed the examination of the gizzard contents of well over 600 rooks. The investigation has occupied almost all the Honorary Curator's week-ends for many months, and, combined with heavy professional duties, residence in Leeds, and the Presidency of the Yorkshire Naturalists' Union for 1945, has made it impossible for him to fulfil his curatorial functions at all adequately. However, it is hoped that the value of the investigation to British agriculture combined with the closer bond that has been forged between our Society and the British Trust, will be accepted as a sufficient recompense for the Honorary Curator's inability to fulfil his urgent duties in the Museum.

Happily, the picture is not without its brighter side, and the presence of Mr. Kenneth Williamson at the Museum, combined with the ever-present help of the Keeper, has prevented undue neglect to this important department.

Excursions were made during the year, and a small amount of material, suitable for the Museum, was collected. It proved to be one of the worst seasons for collecting in the 25 years' experience of the Honorary Curator. This is thought to have been due to the severe and sudden frosts of the end of April and early May. The insects seemed never to recover from the abrupt change of temperature until, perhaps, the late autumn months.

Askham Bog was visited on several occasions, and a report of the excursion there, of the Entomological section of the Yorkshire Naturalists' Union will be found in the *Naturalist*, 1945 : 133-4.

BOTANY.—Honorary Curator, Mr. Charles Allen.

Throughout the year this department has received the valuable assistance of Mr. A. A. Dallman, who has been engaged in checking over the Herbarium before incorporating many new additions which the department has received during the last two or three years. Mr. Dallman reports that the Herbarium is in excellent condition but is still short of the more critical segregates of *Euphrasia*, *Rubus*, *Hieracium* and *Viola*. In other respects, too, it is not as fully representative of the British Flora as we should like it to be. However, Mr. W. G. Bramley has done much to extend our series of seeds, and has also made valuable contributions to our collection of Rusts and Smuts.

Plans are afoot for instituting a Botanical Gallery to illustrate pollination, dispersal, etc., and the main family features of British plants.

The usual routine determinations have been made.

METEOROLOGY.—Honorary Curator, Mr. A. Wentworth Ping, M.A.,
F.R.Met.Soc.

Recorder, Mr. A. Colley.

Statistics of Station: Longitude, $1^{\circ} 5' W.$; Latitude, $55^{\circ} 57' N.$; height above mean sea level 56 feet.

Rainfall. Rain or snow fell to the amount 22.08 inches as against 27.91 inches for 1944, a decrease of 5.83 inches, and 2.29 inches below the average of 24.37 inches for the preceding 50 years. The wettest months of the year were October 3.54 inches, January 2.75 inches and June 2.58 inches. The driest months were November 0.36 inches, March 0.78 inches and July 1.10 inches. The heaviest fall of the year occurred on 25th October, when 1.03 inches fell.

Temperature. Temperature ranged from $83^{\circ}F.$ on 14th July to $9^{\circ}F.$ on 23rd and 24th January; the range of temperature for 1945 being thus $74^{\circ}F.$ as against $59^{\circ}F.$ for 1944.

The mean temperature for the year (mean of max. and min.) was $50.7^{\circ}F.$ as against $49.2^{\circ}F.$ for 1944. July gave the highest mean with 63.3° then August with 60.5° . January and December were the lowest with 32.6° and 40.3° respectively.

Barometer. A mean pressure of 1015.8 millibars (30.00 inches) (1000 millibars = 29.531 inches of mercury) at M.S.L. (corrected for diurnal variations) has been recorded, as against 1015.4 millibars (29.98 inches) for 1944. December gave the lowest mean for the year, 1007.4 millibars (29.75 inches). March was highest, 1025.5 millibars (30.28 inches). The highest reading of the barometer was taken 9th March, 1042.7 millibars (30.794 inches), and the lowest on 19th December, 970.2 millibars (28.647 inches), all readings corrected to M.S.L. The extreme range was therefore 72.5 millibars (2.147 inches) as compared with 60.9 millibars (1.77 inches) in 1944.

Winds. Observations of winds show that during 1945 we had "strong" winds on 60 days (force 4—7, Beaufort Scale) as against 42 in 1944. The winds observed at 9 a.m., G.M.T., were N.W. 85 days, W. 61 days, S.W. 55 days, S. 51 days, N. 42 days, S.E. 31 days, E. 21 days, N.E. 19 days.

Thunder, Snow and Hail. Thunder was heard on 22 days as against 11 days in 1944; snow or sleet fell on 13 days as against 14 days, and hail was recorded on 6 days as against 4 days the previous year.

Sunshine. Sunshine, recorded at Bootham School as in previous years, amounted to 1293.8 hours as against 1190.8 hours in 1944, an increase of 103.0 hours for the year. The daily mean was 3.54 hours, and the percentage

of possible sunshine 29 as against 27 in 1944. The sunniest month of the year was April with 186.1 hours, followed by 179.5 hours in July. December and November were lowest with 26.5 and 29.9 hours respectively.

Climatological Tables. It was not possible to publish the Climatological Tables during the war period. The Tables for the six years 1941-45 are therefore included in this Report thereby bringing the printed records up to date.



PRESENTED

1 APR 1949

CLIMATOLOGICAL SUMMARY—THE YORKSHIRE MUSEUM, YORK, 1940.

Height above Ground:—Thermometers 4 ft. Rain-gauge 1 ft.

1940.	Air Temperature in Degrees Fahrenheit.											Earth Temperature		Rainfall.			Weather.						Bright Sunshine.		
	Means of		Means of Max. + Min.	Absolute Extremes.								At 1 ft.	At 4 ft.	Total.	Max. Fall.	Day.	Number of Days of						Total.	Daily Mean.	Per-centage of possible.
				H. Max.	Day.	L. Min.	Day.	L. Max.	Day.	H. Min.	Day.						Precipitation 0.2 mm. or more.	Precipitation 1 mm. or more.	Snow and Sleet	Snow Lying	Hail	Thunderstorm			
	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	in.	in.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	hr.	hr.	hr.	hr.	%	
	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	in.	in.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	hr.	hr.	hr.	hr.	%	
Jan.	33.7	23.0	45	8	7	21	25	11, 20	34	9	34.2	41.4	2.26	0.53	26	15	10	15	0	0	28.9	0.93	12		
Feb.	39.1	31.2	55	27	15	16	32	2, 10, 12	45	28	34.6	38.9	1.37	0.23	27	21	6	21	0	0	11.1	0.38	4		
March	49.8	36.6	59	18, 23, 24	26	7	41	14	48	19	40.5	40.8	1.75	0.52	9	0	1	0	1	0	92.1	2.97	25		
April	53.4	39.6	67	27	30	6	44	5	50	1, 27	45.1	44.1	1.77	0.47	20	0	0	0	0	2	112.8	3.76	27		
May	64.6	45.6	73	26	39	12, 17	55	1, 2	56	26	53.8	49.1	2.08	0.93	29	0	0	0	0	4	227.6	7.34	46		
June	73.7	51.9	86	8	45	27	58	22	57	16	65.3	54.5	0.62	0.25	21	0	0	0	1	1	305.7	10.19	60		
July	69.8	53.8	76	30, 31	44	28	58	17	59	3, 10	61.5	56.5	6.12	2.13	17	0	0	0	0	8	156.9	5.23	32		
Aug.	67.8	51.6	80	31	40	24	60	23	59	10	59.9	57.6	0.90	0.32	18	0	0	0	0	0	165.9	5.35	36		
Sept.	62.3	47.2	83	4	39	11, 22	53	29	60	1	55.7	56.3	1.27	0.31	16	0	0	0	0	0	155.3	5.18	41		
Oct.	54.8	43.9	61	8, 15, 16	32	12	46	29	52	6, 20	50.9	53.3	3.18	0.67	31	0	0	0	0	0	68.0	2.19	21		
Nov.	49.1	39.6	59	2	28	30	38	30	48	26	45.5	49.5	3.28	0.92	9	0	0	0	0	0	47.4	1.58	19		
Dec.	44.3	35.0	54	16	25	13, 14	37	14	45	30	40.5	45.7	1.73	0.40	14	1	1	0	0	0	38.3	1.24	17		
Totals	662.4	499.0	—	—	—	—	—	—	—	—	587.5	587.7	26.33	—	—	171	18	36	2	15	1410.0	46.34	31		
Means or Extremes	55.2	41.6	86	June 8	7	Jan. 21	25	Jan. 11, 20	60	Sept. 1	49.0	49.0	—	2.13	July 17	—	—	—	—	—	3.85	3.86	31		

CLIMATOLOGICAL SUMMARY—THE YORKSHIRE MUSEUM, YORK, 1940.

Latitude 53° 57' N. Longitude 1° 5' W. Height above Mean Sea Level 56 ft.

[illegible]

CLIMATOLOGICAL SUMMARY—THE YORKSHIRE MUSEUM, YORK, 1941.

Height above Ground :—Thermometers 4 ft. Rain-gauge 1 ft.

1941.	Air Temperature in Degrees Fahrenheit.										Earth Temperature		Rainfall.			Weather.							Bright Sunshine.								
	Means of		Means of Max. + Min.	Absolute Extremes.								At 1 ft.	At 4 ft.	Total.	Max. Fall.	Day.	Number of Days of						Total.	Daily Mean.	Per-centage of possible.						
				H. Max.	Day.	L. Max.	Day.	L. Min.	Day.	H. Min.	Day.						Precipitation 0.2 mm. or more.	Precipitation 1 mm. or more.	Snow and Sleet	Snow Lying	Hail	Thunderstorm									
	Max.	Min.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	in.	in.	—	in.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	
Jan.	36.5	28.6	32.5	45	11	5	30	2	38	11	36.7	42.5	2.53	0.57	21	23	11	13	16	0	0	0	0	39.0	1.26	16	16	16	16	16	
Feb.	42.0	32.2	37.1	52	8, 28	23	33	20	45	9	37.5	41.0	2.66	0.55	19	18	13	7	14	1	0	0	0	47.7	1.70	18	14	14	14	14	
Mar.	47.4	34.3	40.9	57	27	30	39	4	42	2	39.8	41.3	1.88	0.36	9, 25	12	9	4	0	0	0	0	105.2	3.39	29	4	4	4	4		
April	49.8	37.9	43.9	60	12, 21	28	41	8	48	13	43.2	43.1	1.03	0.44	1	10	5	0	0	2	0	0	83.4	2.78	20	0	0	0	0	0	
May	56.6	41.5	49.1	68	31	4	45	14	53	23	48.1	45.8	1.54	0.40	25	10	6	0	0	0	0	2	150.9	4.87	31	0	0	0	0	0	
June	68.9	49.8	59.3	90	22	11	53	2	61	22	56.2	50.3	0.49	0.32	13	3	2	0	0	0	0	1	210.8	7.03	42	0	0	0	0	0	
July	74.0	55.5	64.7	87	7	4	65	15, 19	63	7	61.4	55.2	2.96	0.97	15	16	9	0	0	0	2	2	197.3	6.36	39	0	0	0	0	0	
Aug.	66.4	51.7	59.1	75	3	7	62	5, 16	58	4	58.6	56.3	2.82	0.42	9	23	16	0	0	0	3	3	173.7	5.60	38	0	0	0	0	0	
Sept.	65.8	52.7	59.3	76	4	16	56	15	60	2	57.9	56.0	0.59	0.29	28	8	4	0	0	0	0	0	78.4	2.61	21	0	0	0	0	0	
Oct.	56.6	45.4	51.0	65	4	31	42	29, 30	58	9	52.3	54.5	2.46	0.97	9	19	12	1	0	1	0	0	90.6	2.92	28	0	0	0	0	0	
Nov.	48.3	38.2	43.3	56	24	8	41	15	46	25	44.7	49.1	3.00	0.84	11	19	12	0	0	0	0	0	34.8	1.16	14	0	0	0	0	0	
Dec.	46.5	37.3	41.9	54	9, 11, 14	29	36	28	49	12	42.6	46.9	0.46	0.16	15	11	5	0	0	0	0	0	31.8	1.03	14	0	0	0	0	0	
Totals	658.8	505.1	582.1	—	—	Jan. 5	—	Jan. 2	—	—	579.0	582.0	22.42	—	—	172	104	25	30	4	8	8	1243.6	40.71	—	—	—	—	—	—	—
Means or Extremes	54.9	42.1	48.5	90	June 22	13	30	2	63	July 7	48.3	48.5	—	0.97	—	—	—	—	—	—	—	—	3.40	3.40	28	—	—	—	—	—	—

CLIMATOLOGICAL SUMMARY—THE YORKSHIRE MUSEUM, YORK, 1941.

Latitude 53° 57' N. Longitude 1° 5' W. Height above Mean Sea Level 56 ft.

1941.	Mean Pressure corrected to 32° F. and lat. 45° and reduced to Mean Sea Level.		Absolute Extremes.						Air Temperature.	Humidity.			Mean Amount of Cloud, 0-10	Cloud Amount, 9 a.m.		Wind, No. of Observations, 9 a.m.																		
			Highest.		Lowest.		Date.	9 a.m.	Depression of Wet Bulb.	Vapour Pressure.	Percentage.		No. of Observations.		Cloud Amount, 9 a.m.		Wind, No. of Observations, 9 a.m.																	
	9 a.m.	9 a.m.					Date.	9 a.m.	° F.	9 a.m.	9 a.m.	9 a.m.	0	1-3	4-6	7-9	10	(Beaufort Scale).					Direction.											
			mb.	ins.	mb.	ins.												8 or more	6-7	4-5	1-3	Calm	N	NE	E	SE	S	SW	W	NW				
Jan.	mb.	in.	1013.5	29.93	1040.2	30.724	4	979.5	28.923	22	32.3	1.1	5.5	89	7.7	3	3	2	6	17	0	0	1	30	0	13	5	5	2	0	0	4	2	
Feb.	1000.9	29.56	1027.7	30.349	1027.7	30.349	4	985.2	29.095	19	36.6	1.3	6.4	87	7.9	0	5	3	7	13	0	0	1	27	0	4	4	2	2	4	3	6	3	
Mar.	1013.4	29.93	1031.4	30.463	1031.4	30.463	19	993.9	29.348	2	39.6	2.0	6.7	81	6.9	0	10	2	3	16	0	0	3	28	0	7	3	6	2	4	4	4	1	
April	1015.8	30.00	1035.2	30.572	1035.2	30.572	10	991.6	29.288	3	44.6	3.7	7.0	70	8.1	0	3	5	7	15	0	0	0	30	0	6	7	3	2	1	2	6	3	
May	1014.6	29.96	1026.7	30.322	1026.7	30.322	4	988.9	29.205	23	50.8	5.2	8.1	64	7.7	2	0	5	15	9	0	0	1	30	0	8	2	2	1	5	2	6	5	
June	1019.5	30.11	1027.2	30.333	1027.2	30.333	2	1005.0	29.674	9	60.5	6.0	11.8	66	5.5	1	9	7	6	7	0	0	2	28	0	6	3	3	3	3	0	8	4	
July	1014.5	29.96	1023.2	30.218	1023.2	30.218	1, 2	1002.8	29.612	15	64.8	5.5	14.8	80	7.0	1	6	4	10	10	0	0	2	29	0	4	2	0	1	4	1	11	8	
Aug.	1008.6	29.79	1024.9	30.262	1024.9	30.262	31	996.8	29.433	16	60.3	4.7	13.0	73	6.4	0	4	11	13	3	0	0	8	23	0	1	0	0	0	8	6	9	7	
Sept.	1024.5	30.25	1033.4	30.457	1033.4	30.457	16	1010.4	29.839	28	58.7	3.0	14.5	88	7.7	1	5	0	13	11	0	0	2	28	0	5	3	2	2	5	1	6	6	
Oct.	1020.6	30.14	1035.7	30.593	1035.7	30.593	25	990.4	29.246	18	50.7	2.6	10.3	87	6.9	1	7	3	11	9	0	0	4	25	0	5	0	2	0	5	6	5	8	
Nov.	1014.2	29.95	1028.8	30.381	1028.8	30.381	30	991.5	29.281	10	43.0	1.6	8.2	87	8.2	0	4	3	8	15	0	0	3	27	0	6	0	2	4	8	2	3	5	
Dec.	1021.8	30.17	1040.8	30.734	1040.8	30.734	2	993.3	29.335	7	41.3	2.0	7.3	82	6.6	1	8	4	9	9	0	0	1	30	0	1	0	0	1	7	5	10	7	
Totals	12181.9	350.75	—	—	—	—	—	—	—	—	583.2	38.7	113.6	954	86.6	10	64	49	108	134	0	3	27	335	0	66	29	27	20	54	32	78	59	
Means or Extremes	1015.2	29.23	1040.8	30.734	979.5	28.923	Dec. 2	979.5	28.923	Jan. 22	48.6	3.2	9.5	79	7.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

CLIMATOLOGICAL SUMMARY—THE YORKSHIRE MUSEUM, YORK, 1942.

Height above Ground :—Thermometers 4 ft. Rain-gauge 1 ft.

1942.	Air Temperature in Degrees Fahrenheit.										Earth Temperature		Rainfall.			Weather.						Bright Sunshine.					
	Means of		Means of Max. + Min.	Absolute Extremes.								At 1 ft.	At 4 ft.	Total.	Max. Fall.	Day.	Number of Days of						Total.	Daily Mean.	Per-centage of possible.		
				H. Max.	Day.	L. Min.	Day.	L. Max.	Day.	H. Min.	Day.						Precip-itation 0.2 mm. or more.	Precip-itation 1 mm. or more.	Snow and Sleet	Snow Lying	Hail	Thunder-storm					
	Max.	Min.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	in.	in.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	hr.	hr.	hr.	hr.	hr.	%
	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	%
Jan.	37.3	30.3	33.8	50	2, 3	18	21	26	21	45	3, 4	37.2	43.3	3.41	0.54	30	21	12	14	21	1	0	16.8	0.54	7		
Feb.	37.3	27.8	32.5	45	28	17	8	30	21	35	10	34.9	40.1	1.22	0.60	2	11	15	5	19	0	0	37.2	1.43	15		
March	45.7	34.5	40.1	60	17	26	8	29	5	49	17	38.8	40.1	1.41	0.54	4	12	3	10	5	0	2	49.7	1.60	14		
April	55.5	40.0	47.7	65	16	34	25	48	23	46	10	45.8	43.9	1.22	0.32	3	11	0	8	0	1	1	216.8	7.23	52		
May	(60.6)	(43.2)	(51.9)	(70)	6	(33)	9	(46)	11	(52)	18	50.5	47.5	2.57	0.70	18	16	0	12	0	1	4	205.9	6.64	42		
June	(67.4)	(49.1)	(58.3)	(88)	2, 5	45	11	(53)	13	(58)	23	56.5	51.6	1.00	0.39	13	7	0	4	0	0	0	215.0	7.17	43		
July	67.7	52.0	59.9	74	28	28	28	58	17	60	4, 22	59.3	54.9	2.11	0.24	28	19	0	15	0	0	3	186.8	6.03	37		
Aug.	68.5	54.8	61.7	84	28	47	14	57	4	63	27	59.5	55.9	2.90	1.16	26	14	0	11	0	0	1	111.7	3.60	24		
Sept.	63.6	49.5	56.5	72	8	32	27	52	25	59	1	57.0	56.4	2.02	0.54	20	16	0	11	0	0	0	145.8	4.86	38		
Oct.	57.1	44.7	50.9	67	14	32	28	46	28	57	19	51.6	53.4	2.22	1.01	20	13	0	7	0	0	0	87.9	2.83	27		
Nov.	47.2	36.9	42.1	54	8	30	18, 23	37	4	46	11	44.6	49.4	1.15	0.48	2	10	0	5	0	0	0	47.4	1.58	19		
Dec.	47.7	38.6	43.1	56	13	22	4	37	29	50	11	43.0	46.3	1.70	0.27	4	18	2	13	2	0	0	21.7	0.70	9		
Totals	655.6	501.4	578.5	—	—	—	—	—	—	—	—	578.7	582.8	22.93	—	—	168	32	115	47	3	11	1342.7	44.21	—		
Means or Extremes	(54.6)	(41.8)	(48.2)	(88)	June 6	17	Feb. 8	26	Jan. 21	63	Aug. 27	48.2	48.6	—	1.16	Aug. 26	—	—	—	—	—	—	3.68	3.68	30		

CLIMATOLOGICAL SUMMARY—THE YORKSHIRE MUSEUM, YORK, 1943.

Latitude 53° 57' N. Longitude 1° 5' W. Height above Mean Sea Level 56 ft.

1943.	Mean Pressure corrected to 32° F. and lat. 45° and reduced to Mean Sea Level.		Absolute Extremes.						Air Tempera- ture.	Humidity.			Mean Amount of Cloud, 0-10	Cloud Amount, 9 a.m.					Wind, No. of Observations, 9 a.m.												
			Highest.		Lowest.		Date.	Date.		Vapour Pressure.	Percentage.	No. of Observations.					(Beaufort Scale).					Direction.									
	9 a.m.	9 a.m.										9 a.m.	° F.	° F.	9 a.m.	9 a.m.	9 a.m.	° F.	° F.	0	1-3	4-6	7-9	10	S or more	6-7	4-5	1-3	Calm	N	NE	E	SE	S	SW	W	NW
Jan.	1005.1	29.68	1026.8	30.326	24	975.2	28.798	31	38.5	0.8	7.3	92	8.1	0	5	3	6	17	0	1	1	29	0	2	2	0	7	8'	5	3	4
Feb.	1018.7	30.08	1037.8	30.649	20	986.9	29.143	1	41.8	2.1	7.4	82	6.4	2	7	3	8	8	0	2	3	23	0	2	0	0	0	5	7	13	1
Mar.	1020.4	30.13	1039.7	30.708	1	1004.3	29.657	30	42.5	2.3	7.5	81	7.1	1	7	4	7	12	0	1	1	29	0	4	4	2	0	6	2	10	3
April	1017.0	30.03	1030.4	30.426	3	999.0	29.501	22	52.6	4.9	9.1	67	6.1	2	5	8	10	5	2	1	5	22	0	0	0	2	2	2	9	9	8
May	1017.3	30.04	1041.5	30.757	16	973.0	28.732	8	55.6	5.3	10.1	67	6.1	3	7	4	10	7	0	2	4	25	0	3	2	2	4	5	1	6	8
June	1017.9	30.06	1032.8	30.496	28	996.7	29.429	2	60.2	5.3	12.4	70	7.3	0	5	3	14	8	0	0	5	25	0	3	1	1	2	2	10	7	4
July	1016.1	30.01	1027.0	30.331	1	1003.4	29.628	12	62.0	5.8	12.9	68	7.0	3	4	4	9	11	0	0	4	27	0	4	3	2	2	3	7	4	6
Aug.	1011.2	29.86	1025.4	30.277	17	1001.2	29.565	21	61.0	4.3	13.8	75	7.5	0	3	7	8	13	0	0	5	26	0	0	1	2	2	9	5	6	6
Sept.	1015.1	29.98	1023.6	30.225	4	1003.3	29.633	28	56.9	3.9	12.0	76	6.1	1	10	5	5	9	0	0	7	23	0	1	2	3	1	7	2	7	7
Oct.	1013.4	29.93	1026.1	30.298	29	994.2	29.362	17	49.8	1.6	10.8	89	7.0	2	5	4	5	15	0	0	1	30	0	2	1	0	5	16	4	2	1
Nov.	1014.3	29.95	1036.3	30.604	19	976.2	28.828	24	41.9	1.6	7.9	87	7.6	2	3	1	14	10	0	2	0	28	0	1	0	0	4	2	1	10	12
Dec.	1021.9	30.18	1039.3	30.691	13	990.3	29.244	19	38.3	1.2	7.0	89	7.4	1	6	2	9	13	0	0	1	30	0	4	6	3	1	1	4	9	3
Totals	12188.4	359.93	—	—	— May 16	—	—	— May 8	601.1	39.1	118.2	94.3	83.7	17	67	48	105	128	2	9	37	317	0	26	22	15	30	66	57	86	63
Means or Extremes	1015.7	29.99	1041.5	30.757		973.0	28.732		50.1	3.3	9.9	79	7.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

CLIMATOLOGICAL SUMMARY—THE YORKSHIRE MUSEUM, YORK, 1944.

Height above Ground :—Thermometers 4 ft. Rain-gauge 1 ft.

1944.	Air Temperature in Degrees Fahrenheit.										Earth Temperature		Rainfall.			Weather.						Bright Sunshine.			
	Means of		Means of Max. + Min.	Absolute Extremes.								At 1 ft.	At 4 ft.	Total.	Max. Fall.	Day.	Number of Days of						Total.	Daily Mean.	Per-centage possible.
	Max.	Min.		H. Max.	Day.	L. Min.	Day.	L. Max.	Day.	H. Min.	Day.						Precipitation 0.2 mm. or more.	Precipitation 1 mm. or more.	Snow and Sleet	Snow Lying	Hail	Thunderstorm			
	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	in.	in.	in.	° F.	° F.	° F.	° F.	° F.	° F.	hr.	hr.	hr.	%		
Jan.	47.5	36.5	42.0	56	26, 27, 30	25	11	34	10	47	2, 3	40.6	43.5	2.40	0.88	22	13	10	1	0	0	0	27.0	0.87	11
Feb.	43.7	34.2	38.9	56	2	24	29	36	27	50	2	39.8	43.1	1.71	0.44	15	19	12	4	5	1	0	39.4	1.36	14
March	48.9	35.2	42.1	65	26	26	1	37	4	44	27	40.5	42.3	0.47	0.20	20	9	4	5	2	1	0	119.3	3.85	33
April	57.6	42.3	49.9	70	30	27	1	46	7	51	24	47.1	45.1	2.57	0.75	3	14	10	0	0	0	1	133.8	4.46	32
May	60.9	44.0	52.5	83	29	33	7	48	20	57	27	51.3	48.5	1.14	0.41	31	9	7	0	0	1	3	176.4	5.69	36
June	63.6	48.5	56.1	71	24	43	18, 19	55	6	55	4	55.7	51.7	2.52	0.77	26	16	12	0	0	0	3	165.8	5.53	33
July	68.5	55.0	61.7	76	16	49	12	60	18, 21	60	3	59.1	54.5	2.23	0.84	3	17	10	0	0	0	1	104.8	3.38	21
August	70.5	54.5	62.5	81	16	48	14	57	20	61	11, 18	60.1	56.4	3.09	0.94	19	16	7	0	0	0	2	146.3	4.72	32
Sept.	61.7	46.9	54.3	70	18	37	10, 12	53	24	56	20	55.1	55.4	4.47	1.30	1	15	13	0	0	0	1	118.1	3.94	31
Oct.	54.5	43.1	48.8	60	5	35	2, 29	47	28, 31	49	8, 9, 22	50.3	52.7	2.66	0.55	19	20	11	0	0	0	0	82.3	2.65	25
Nov.	48.4	38.1	43.3	57	19, 22	30	27	41	14	47	20	44.2	48.7	3.17	0.44	23	22	16	1	0	0	0	48.9	1.63	19
Dec.	42.6	34.2	38.4	54	17	24	26	31	25	47	1	40.2	45.4	1.48	0.29	10	11	9	3	1	1	0	27.7	0.89	12
Totals	668.4	512.5	590.5	—	— May 29	—	— Feb. 29 Dec. 26	—	— Dec. 25	—	— Aug. 11, 18	584.0	587.3	27.91	—	— Sept. 1	181	121	14	8	4	11	1189.8	38.97	—
Means or Extremes	55.7	42.7	49.2	83		24		31		61		48.7	48.9	—	1.30		—	—	—	—	—	—	3.25	3.25	27

CLIMATOLOGICAL SUMMARY—THE YORKSHIRE MUSEUM, YORK, 1945

Height above Ground:—Thermometers 4 ft. Rain-gauge 1 ft.

[illegible]



PRESENTED

1 APR 1947

4-10-1914
a. p. 14



Printed by
THE HERALD PRINTING WORKS
CONEY STREET, YORK
[22604]

